



Docket No.: 15464 US2 (C038435/0173685)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of : )  
Luis PASAMONTES, *et al.* )  
Serial No.: 10/695,980 ) Examiner: Not yet assigned  
Filed: October 29, 2003 ) Art Unit: 1652  
For: **FERMENTATIVE CAROTENOID** )  
**PRODUCTION** )

New York, New York  
February 10, 2004

**INFORMATION DISCLOSURE STATEMENT UNDER RULE 1.56**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Applicants wish to make of record the following documents (Form PTO-1449 is enclosed). Copies of these documents are not being submitted herewith, because each was made of record in Parent Application Serial No. 09/920,923, filed August 2, 2001, now U.S. Patent No. 6,677,134, which is a divisional of Application Serial No. 08/980,832, filed December 1, 1997, now U.S. Patent No. 6,291,204, to which the present application claims benefit under 35 USC §120. See, 37 CFR 1.98(d).

**U.S. PATENT DOCUMENTS**

A1 5,607,839  
A2 5,858,761  
A3 6,087,152

## FOREIGN PATENT DOCUMENTS

B1	EP 0 393 690
B2	EP 635 576 A1
B3	EP 0 735 137 A1
B4	EP 0 747 483 A2
B5	WO 91/13078
B6	WO 95/18220

## OTHER DOCUMENTS

- C1 Pasamontes, *et al.*, "Isolation and characterization of the carotenoid biosynthesis genes of *Flavobacterium* sp. strain R1534," Gene, Vol. 185, pp. 35-41 (1997)
- C2 Misawa, *et al.*, "Canthaxanthin Biosynthesis by the Conversion of Methylene to Keto Groups in a Hydrocarbon  $\beta$ -Carotene by a Single Gene," Biochemical and Biophysical Research, Vol. 209, No. 3, pp. 867-876 (1995)
- C3 Misawa, *et al.*, "Structure and Functional Analysis of a Marine Bacterial Carotenoid Biosynthesis Gene Cluster and Astaxanthin Biosynthetic Pathway Proposed at the Gene Level," Journal of Bacteriology, Vol. 177, No. 22, pp. 6575-6584 (1995)
- C4 Kajiwara, *et al.*, "Isolation and functional identification of a novel cDNA for astaxanthin biosynthesis from *Haematococcus pluvialis*, and astaxanthin synthesis in *Escherichia coli*," Plant Molecular Biology, Vol. 29, pp. 343-352 (1995)
- C5 Hundle, *et al.*, "Functional assignment of *Erwinia herbicola* Eho 10 carotenoid genes expressed in *Escherichia coli*," Mol. Gen. Genet., Vol. 245, pp. 406-416 (1994)

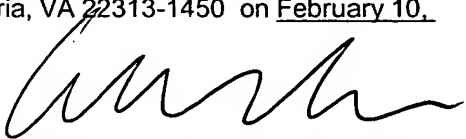
Applicants request that these documents be considered by the Examiner before issuance of a first office action on the merits and made of record in this file. The Examiner is also asked to initial and return a copy of the enclosed PTO-1449 form to evidence such consideration.

This Information Disclosure Statement is being filed in accordance with the following provisions:

- [x] 37 CFR § 1.97(b)(3) To the best of the undersigned's knowledge, before the mailing date of a first Office Action on the merits. No fee is required.

If it is determined that a fee is required as set forth in 37 CFR § 1.17(p) or if any additional fees are required, please charge such fee to Deposit Account No. 02-4467. A duplicate copy of this document is enclosed.

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on February 10, 2004.

  
Gonzalo Merino, Ph.D., Reg. No. 51,192

Respectfully submitted,

By: 

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Form PTO-1449  
(Rev. )U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICE

ATTY. DOCKET NO.

15464 US2 (C038435/0173685)

SERIAL NO.

10/695,980

INFORMATION DISCLOSURE STATEMENT  
BY APPLICANT

APPLICANT

Luis PASAMONTES, *et al.*

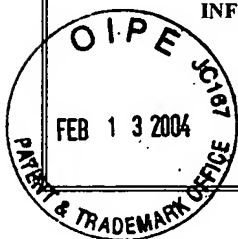
FILING DATE

October 29, 2003

GROUP

1652

(Use several sheets if necessary)



## U.S. PATENT DOCUMENTS

Examiner Initial	CiteNo	U.S. Patent Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate
	A1	5,607,839	3/1997	Tsubokura, <i>et al.</i>			
	A2	5,858,761	1/1999	Tsubokura, <i>et al.</i>			
	A3	6,087,152	7/2000	Hohmann, <i>et al.</i>			

## FOREIGN PATENT DOCUMENTS

		Document Number	Date	Country	Class	Subclass	Translation	
							Yes	No
	B1	EP 0 393 690	10/1990	Europe				
	B2	EP 635 576 A1	1/1995	Europe				
	B3	EP 0 735 137 A1	10/1996	Europe				
	B4	EP 0 747 483 A2	12/1996	Europe				
	B5	WO 91/13078	9/1991	PCT				
	B6	WO 95/18220	7/1995	PCT				

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

C1	Pasamontes, <i>et al.</i> , "Isolation and characterization of the carotenoid biosynthesis genes of <i>Flavobacterium</i> sp. strain R1534," <i>Gene</i> , Vol. 185, pp. 35-41 (1997)
C2	Misawa, <i>et al.</i> , "Canthaxanthin Biosynthesis by the Conversion of Methylene to Keto Groups in a Hydrocarbon $\beta$ -Carotene by a Single Gene," <i>Biochemical and Biophysical Research</i> , Vol. 209, No. 3, pp. 867-876 (1995)
C3	Misawa, <i>et al.</i> , "Structure and Functional Analysis of a Marine Bacterial Carotenoid Biosynthesis Gene Cluster and Astaxanthin Biosynthetic Pathway Proposed at the Gene Level," <i>Journal of Bacteriology</i> , Vol. 177, No. 22, pp. 6575-6584 (1995)
C4	Kajiwar, <i>et al.</i> , "Isolation and functional identification of a novel cDNA for astaxanthin biosynthesis from <i>Haematococcus pluvialis</i> , and astaxanthin synthesis in <i>Escherichia coli</i> ," <i>Plant Molecular Biology</i> , Vol. 29, pp. 343-352 (1995)
C5	Hundle, <i>et al.</i> , "Functional assignment of <i>Erwinia herbicola</i> Eho 10 carotenoid genes expressed in <i>Escherichia coli</i> ," <i>Mol. Gen. Genet.</i> , Vol. 245, pp. 406-416 (1994)

EXAMINER

DATE CONSIDERED

Examiner: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.